

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A rear plate of a plasma display panel, the rear plate comprising:

a glass substrate;

electrodes formed in a shape of patterns on an upper surface of the glass substrate;

a dielectric layer formed on upper surfaces of the electrode and the upper surface of the glass substrate;

barrier ribs formed in a shape of a pattern through etching on an upper surface of the dielectric layer; and

phosphorous layers formed on side surfaces and bottom surfaces of the barrier ribs, to emit visible rays according to electric signals, wherein:

the electrodes include an effective electrode portion formed at a central portion of the glass substrate to apply an address signal, an electrode pad portion formed at a peripheral portion of the glass substrate and connected with a driving circuit to transfer a signal, and an electrode connecting portion interconnecting the effective electrode portion and the electrode pad portion, and has a specific resistance of $2.5 \times 10^{-6} \sim 4 \times 10^{-6} \Omega \text{ cm}$;

the dielectric layer covers all of the effective electrode portion and a part of the electrode connecting portion of each electrode, and is made from complex of glass and ceramic filler, which has a dielectric constant of 8~20, a reflectance of 50~80%, an etching rate of 0.03~0.8 $\mu\text{m/min}$ with respect to inorganic acid, and a thickness of 10~30 μm ;

the barrier ribs are formed in a shape of stripes on the upper surface of the dielectric layer while being located between the effective electrode portions, and are made from complex of glass and ceramic filler, which has a dielectric constant of 7~18, a reflectance of 40%~70%, an etching rate of 1.0~30.0 $\mu\text{m/min}$ with respect to inorganic acid, and a thickness of 100~160 μm , and each of the barrier ribs meets conditions, $A/B=0.67\sim 1.25$ and $B/C=0.32\sim 1.0$, wherein A, B, and C represent width of an uppermost portion, a middle portion, and a lowermost portion of each barrier rib, respectively;

the phosphorous layers have a thickness of 10~30 μm .

2. (Previously Presented) A rear plate of a plasma display panel as claimed in claim 1, wherein the barrier ribs are spaced equal intervals apart from each other.

3. (Previously Presented) A rear plate of a plasma display panel as claimed in claim 1, wherein the barrier ribs are spaced unequal intervals apart from each other.

4. (Previously Presented) A rear plate of a plasma display panel as claimed in claim 2 or 3, wherein protrusions are formed on side surfaces of the barrier ribs opposed to each other.

5. (Previously Presented) A rear plate of a plasma display panel, the rear plate comprising:

a glass substrate;

electrodes formed in a shape of patterns on an upper surface of the glass substrate;

a dielectric layer formed on upper surfaces of the electrode and the upper surface of the glass substrate;

barrier ribs formed in a shape of a pattern through etching on an upper surface of the dielectric layer; and

phosphorous layers formed on side surfaces and bottom surfaces of the barrier ribs, to emit visible rays according to electric signals, wherein:

the electrodes includes an effective electrode portion formed at a central portion of the glass substrate to apply an address signal, an electrode pad portion formed at a peripheral portion of the glass substrate and connected with a driving circuit to transfer a signal, and an electrode connecting portion interconnecting the effective electrode portion and the electrode pad portion, and has a specific resistance of $2.5 \times 10^{-6} \sim 4 \times 10^{-6} \Omega \text{ cm}$;

the dielectric layer covers all of the effective electrode portion and a part of the electrode connecting portion of each electrode, and is made from complex of glass and ceramic filler, which has a dielectric constant of 8~20, a reflectance of 50~80%, an etching rate of 0.03~0.8 $\mu\text{m}/\text{min}$ with respect to inorganic acid, and a thickness of 10~30 μm ;

the barrier ribs are formed in a shape of matrix on the upper surface of the dielectric layer while being located between the effective electrode portions, and are made from complex of glass and ceramic filler, which has a dielectric constant of 7~18, a reflectance of 40%~70%, an etching rate of 1.0~30.0 $\mu\text{m}/\text{min}$ with respect to inorganic acid, and a thickness of 100~160 μm , and each of the barrier ribs meets conditions, $A/B=0.67\sim 1.25$ and $B/C=0.32\sim 1.0$, wherein A, B, and C represent width of an uppermost portion, a middle portion, and a lowermost portion of each barrier rib, respectively;

the phosphorous layers have a thickness of 10~30 μm .

6. (Previously Presented) A rear plate of a plasma display panel as claimed in claim 5, wherein the barrier ribs are spaced equal intervals apart from each other.

7. (Previously Presented) A rear plate of a plasma display panel as claimed in claim 5, wherein the barrier ribs are spaced unequal intervals apart from each other.

8. (Currently Amended) A rear plate of a plasma display panel as claimed in claim 6 or 7, wherein, when the transverse direction of the barrier ribs 146 is given as an X direction and the longitudinal direction thereof is given as a Y direction, thickness of each of the barrier ribs in the X direction is different from thickness thereof in the Y direction.

Application No. 10/537,763
Amendment dated April 2, 2008
Reply to Office Action of January 2, 2008

Docket No.: 5457-0104PUS1

REMARKS

This Substitute Amendment replaces the Amendment filed in error on March 28, 2008. Applicants request reconsideration of the application in view of the present Amendment. Claims 1-8 are pending, with claim 8 amended by way of the present Amendment. In the Official Action, the title was objected to; claim 8 was objected to; the Figures were objected to; and claims 1-8 were allowed.

Applicants acknowledge with appreciation the indication of allowable subject matter.

The title, claim 8, and the drawings are amended as requested in the Official Action. The specification is further amended to be consistent with amended Figure 1 which depicts the effective portion 120b and the electrode pad portion 120a as requested by the Examiner. No new matter is added.

Conclusion

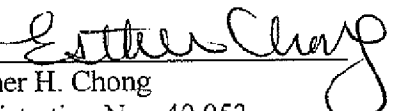
In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael E. Monaco, Reg. No. 52,041, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: April 2, 2008

Respectfully submitted,

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